

## **REMARKS**

The Applicant has carefully reviewed and considered the Examiner's Office Action dated March 17, 2006. Reconsideration is respectfully requested in view of the following comments.

By this Amendment, the title of the invention is changed to that suggested by the Examiner and claims 34-35, 43-44, 52-53, 61-62 and 118 are amended. Accordingly, Claims 34-120 are pending in the present application.

Claims 34-37, 42-46, 49-50, 52-55, 58-59, 61-62 and 66-117 were rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 5,901,224 to Hecht for the reasons set forth in the paragraphs spanning pages 3-10 of the Action. This rejection is respectfully traversed.

Independent claims 34-35, 43-44, 52-53, and 61-62 were amended to recite that the "document information shows an identification of a document classification". Thus, claims 34, 43, 52 and 61 (claims 35, 44, 53 and 62) recite that the digital watermark is embedded in a predetermined region identified by the document information based on the location information (format of the image data) which includes the document information that shows an identification of a document classification. That is, according to the claimed invention, a digital watermark is embedded in a predetermined region, in which important information to be protected is described, and the predetermined region is identified by a document information which shows an identification of a document classification. Accordingly, the claimed invention enables digital watermarks to be embedded in proper regions according to the document classification.

Hecht is directed to a quasi-reprographics with variable embedded data with

applications to copyright management, and distribution control where a source document is digitized, appropriate locations for embedded code are detected and any embedded code located in the digitized document along with the detected locations are forwarded to a decoder. Thus, contrary to the claimed invention set forth in claim 34, Hecht does not disclose

an image providing apparatus which defines a location information indicating a plurality of regions in image data **for embedding a digital watermark in a predetermined region identified by a document information** among the plurality of regions and provides said image data, in which said digital watermark is embedded based on said location wherein said document information shows an identification of a document classification; and

an image utilizing apparatus which **extracts said digital watermark from said image data** provided by said image providing apparatus **based on said location information**, and verifies whether any of said image data in said predetermined region, in which said digital watermark is embedded, has been tampered.

Instead, Hecht discloses scanning a document into a digitized map, which is then examined for embedded readable data or areas suitable for insertion of the embedded data, such as glyph codes. No where does Hecht disclose “a location information indicating a plurality of regions in image data for embedding a digital watermark in a predetermined region identified by a document information” where the digital watermark is extracted from the image data based on the location information where the document information shows an identification of a document classification.

To the contrary, Hecht discloses that a human readable watermark can be configured of glyph codes. No where does Hecht disclose location information or any information for embedding the watermark in a predetermined region of a plurality of regions for image data, as recited in claims 34-35, 43-44, 52-53 and 61-62. Hecht simply

discloses scanning in a document and then detecting an area suitable for insertion of glyph codes, for example. Hecht is silent as to the information that determines what region of the scan document into which glyph codes are inserted.

Column 8, line 48 through column 9, line 7 of Hecht does not disclose document information or any other information that determines where a digital watermark should be embedded as required by the claims, as set forth above. Nor does Hecht disclose document information which shows an identification of a document classification as required by the independent claims and described on page 78, lines 6-31 of the originally filed specification. Hecht simply discloses that glyph pattern codes are embedded and those codes contain information relevant to that particular copy of the document. The location of the watermark (e.g., glyphs) are not identified by this information as required by all of the independent claims, as Hecht discloses that the glyphs contain information relevant to that particular copy of the document. Further, the glyph code pattern is not the watermark, but a portion of the watermark. The claimed invention identifies the region of the image data where the watermark is to be embedded based on the document information which shows an identification of a document classification.

With respect to the verification of whether said image data, in which the watermark is embedded, has been tampered, Hecht discloses machine readable watermarks versus human readable watermarks. This does not disclose an image utilizing apparatus that extracts the digital watermark from the image data based on the location information and verifies whether the image data, in which the digital watermark is embedded, has been tampered. To the contrary, Hecht simply discloses employing machine readable watermarks that humans cannot see. This is not the claimed invention,

as set forth in claims 34-35 and 61-62. Accordingly, Hecht cannot anticipate the above independent claims because it fails to disclose each and every feature of the claimed invention. Withdrawal of the rejection under 35 U.S.C §102(e) is respectfully requested.

Claims 118-120 were rejected under 35 U.S.C §103(a) as being unpatentable over Hecht in view of Official Notice, as explained in paragraph 9 spanning pages 7-10 of the Action. This rejection is respectfully traversed.

As argued above, column 8, line 48 through column 9, line 6 of Hecht does not disclose document information or any other information that determines where a digital watermark should be embedded. In column 8, lines 60-65 of Hecht, Hecht discloses machine readable watermarks versus human readable watermarks. Hecht does not disclose the claimed verification. Thus, Hecht does not disclose at least 1) the recited “document identifying unit” of claim 118 which identifies at least one predetermined region of the plurality of region **by a document information** that shows an identification of a document classification; 2) the recited “document format database” of claim 118 where format information embeds a digital watermark in at least one predetermined region of the plurality of regions identified by the document information **based on the document classification**; and 3) the recited “digital watermark extracting unit” of claim 118 that extracts the digital watermark and verifies whether any of said processed image data, in which said digital watermark is embedded, has been tampered.

While the Examiner agrees that feature 2) is not disclosed by Hecht, it is the Action’s position “that it is well known that all databases manage information” (last three lines of page 8 of the Action). However, the recited document format base does much more than simply manage information, it provides a document format information for

embedding a watermark in the at least one predetermined region of the plurality of regions identified by the document information based on the document classification. Hecht merely refers to internal and external databases and does not disclose, teach or suggest a region where a digital watermark should be embedded is defined based on the document information which shows an identification of a document classification. The Action's use of Official Notice is directed to a general database exchange that does not teach or suggest a digital watermark being embedded in a region identified by document information based on the document classification, as set forth in claim 118.

If the Examiner still believes that the general teaching of data management meets the claim, she is asked to provide a reference that teaches or suggest a region where a digital watermark should be embedded is defined based on the document information which shows an identification of a document classification. Without a reference showing the claimed invention, it is submitted that claims 118-120 are patentable over Hecht and withdrawal of this rejection is respectfully requested.

Claims 38-41, 47-48, 51, 56-57, 60, 63 and 64-65 were rejected under 35 U.S.C §103(a) as being unpatentable over Hecht in view of U.S. Patent No. 5,504,941 to Wong for the reasons in paragraph 10 spanning pages 10-14 of the Action. This rejection is respectfully traversed.

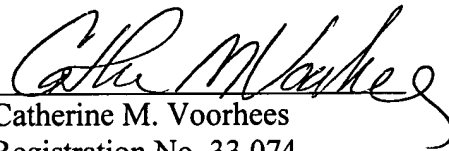
Wong is directed to a method and apparatus for digital watermarking of images. In particular, Wong provides an invisible digital watermarking technique with a watermark insertion procedure used by the image owner and a corresponding watermark extracting procedure used by the receiver of the image. Wong does not disclose, teach or suggest a system that identifies a region where a digital watermark should be embedded

based on document information which shows an identification of a document classification. Nor would any combination of Hecht and Wong result in system that enables digital watermarks to be embedded in proper regions of an image according to the document classification. Consequently, it is submitted that claims 34-120 are patentable over any combination of Hecht and Wong and withdrawal of this rejection is respectfully requested.

In view of the foregoing comments, it is believed that claims 34-120 are allowable over the prior art of record. Accordingly, it is respectfully requested that a Notice of Allowance be issued indicating that claims 34-120 are allowed over the prior art of record.

Should the Examiner believe that a conference would advance the prosecution of this application, the Examiner is encouraged to telephone the undersigned counsel to arrange such a conference.

Respectfully submitted,



Catherine M. Voorhees  
Registration No. 33,074

VENABLE LLP  
P.O. Box 34385  
Washington, D.C. 20043-9998  
Telephone: (202) 344-4000  
Telefax: (202) 344-8300

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